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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,978	10/31/2003	Atsushi Kikuchi	KIKUCHI=4	8966

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EXAMINER	
BRUENJES, CHRISTOPHER P	
ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/697,978	KIKUCHI ET AL.	
	Examiner	Art Unit	
	Christopher P Bruenjes	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) *3 and 7-11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-11* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/966,729.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20031031*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-2 and 4-6, drawn to preform, classified in class 428, subclass 542.8.

II. Claims 3 and 7-9, drawn to bottle, classified in class 428, subclass 35.7.

III. Claims 10-11, drawn to method, classified in class 264, subclass 514.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a preform for making a multi-layered container having larger mouth portion than body portion and the inventions are deemed patentably distinct since there is nothing on this record to show them to

be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another process such as co-extruding the three layers into a mold, in which the intermediate layer extrusion ends before the inner and outer layer extrusions, so that the inner and outer layers completely seal the intermediate layer without forming a lump before molding.

Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can

be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another process such as co-extruding the three layers into a mold, in which the intermediate layer extrusion ends before the inner and outer layer extrusions, so that the inner and outer layers completely seal the intermediate layer without forming a lump before molding.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Sheridan Neimark on April 28, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-2 and 4-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3, and 7-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al (USPN 5,653,265) in view of Yamada et al (USPN 4,528,219).

Nakagawa et al teach a preform which is reshaped to a multi-layered bottle comprising a mouth portion, a body portion and a bottom portion, wherein at least the body portion and the bottom portion comprise an inner layer, an intermediate layer, and an outer layer (Fig. 6). Inherently, at the center of the bottom portion, a half-width of a diffuse scattering peak by an x-ray diffraction of a surface of the outer layer is larger than a half-width of a diffuse scattering peak by an x-ray diffraction of a surface of the inner layer, because the three layers are transparent plastics such as polyethylene and ethylene vinyl acetate (col.9, l.60-65 and col.10, l.50-54), and there is no gate portion or a trace of the gate portion because the bottle is not formed by injection molding. The intermediate layer is completely sealed by the inner layer and the outer layer and is composed of a material that is a gas-barrier resin such as ethylene-vinyl-acetate or a heat-resistant resin such as polystyrene foam (col.9, l.60-65 and col.10, l.50-54). The mouth portion comprises an external thread and has a generally cylindrical and elongated shape (Fig. 6). Note the limitations that the preform is compression molded and that the preform is

formed from a composite molten resin lump are process limitations and receive little patentable weight, because the same structure including no gate portion and a completely sealed intermediate layer can be formed by another process and article claims are defined by structure only and not the process of making that structure. Nakagawa et al also teach that the two molding materials to be used in combination as the inner and outer layer and the intermediate layer are many different combinations depending on the intended use of the bottle or container (col.9, l.66-67 and col.10, l.1-6. If the two different molding materials, which have a poor affinity, are used in combination an adhesive agent is provided between them (col.10, l.2-6).

Nakagawa et al fail to explicitly teach polyester as the inner and outer layer or sandwiching layer. However, Yamada et al teaches that when forming bottle for drinks polyethylene terephthalate, which is a polyester resin, is used to form the bottle because of its excellent moldability, impact resistance, rigidity, gas barrier property, light weight and transparency (col.1, l.21-26). Yamada also teaches that an ethylene-vinyl alcohol layer is provided as an intermediate layer between an inner and outer layer of polyester in order to increase the oxygen barrier property of the bottle (col.1, l.31-37). One of

ordinary skill in the art would have recognized that polyethylene terephthalate as the sandwiching layer and ethylene-vinyl alcohol copolymer are the materials used to form bottles for drinks, because of the oxygen barrier properties of ethylene-vinyl alcohol copolymer and the impact resistance, rigidity, light weight and transparency of polyethylene terephthalate, as taught by Yamada et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to use polyester as the sandwiching layer and ethylene-vinyl alcohol copolymer for the sandwiched layer of the preform and bottle of Nakagawa, because of the oxygen barrier properties of ethylene-vinyl alcohol copolymer and the impact resistance, rigidity, light weight and transparency of polyethylene terephthalate, which are important properties when forming a bottle for drinks, as taught by Yamada et al, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use, absent the showing of unexpected result. *In re Leshin*, 125 USPQ 416.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB
May 12, 2004

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

5/14/04